Contents of Volume 13

Volume 13, No. 1, 1981

ACSM 1981 Annual Meeting Information ii

Letters to the editor ix

Original Investigations

Exercise compliance and the prevention of a recurrence of myocardial infarction
Roy J. Shephard, Paul Corey, and T. Kavanagh 1

Carotid palpation, coronary heart disease and exercise rehabilitation
N.B. Oldridge, W.L. Haskell, and P. Single 6

Acute effects of cigarette smoking on left ventricular function at rest and exercise
Michael J. Behr, Ka-Hei Leong, and Robert H. Jones 9

Reduced training frequencies and maintenance of increased aerobic power
Robert C. Hickson and Maureen A. Rosenkoetter 13

Time course of the adaptive responses of aerobic power and heart rate to training
R.C. Hickson, J.M. Hagberg, A.A. Ehsani, and J.O. Holloszy 17

Ventilatory endurance in athletes and non-athletes
Bruce J. Martin and Joel M. Stager 21

O_2 uptake and work by in situ muscle performing contractions with constant shortening
W.N. Stainsby, C.V. Peterson, Jr., and R.W. Barbee 27

Predictive validity of a computer model of body temperature during exercise
Peter A. Hancock 31

A model for gymnastics vaulting
Andrew Dainis 34

Mathematical modelling and simulation of a tennis racket
M. Brannigan and S. Adali 44

Biomechanics of sit-up exercises
B. Ricci, M. Marchetti, and F. Figura 54

Physical activity and calcium modalities for bone mineral increase in aged women
Everett L. Smith, Jr., William Reddan, and Patricia E. Smith 60

Physical activity patterns determined by heart rate monitoring in 6-7 year-old children
Thomas B. Gilliam, Patty S. Freedson, David L. Geenen, and Behzad Shahraray 65

Instructions for authors xiii

Policy Statement Regarding the Use of Human Subjects and Informed Consent xvi

Volume 13, No. 2, 1981

Abstracts from 1981 ACSM Annual Meeting

Volume 13, No. 3, 1981

Brief Reviews

Effects of exercise on protein and amino acid metabolism
P.W.R. Lemon and F.J. Nagle 141

Sensory cues for perceived exertion: a review
Patricia M. Mihevic 150

Original Investigations

Reasons for dropout from exercise programs in post-coronary patients
George M. Andrew, Neil B. Oldridge, John O. Parker, David A. Cunningham, Peter A. Rechnitzer, Norman L. Jones, Carol Buck, Terence Kavanagh, Roy J. Shephard, John R. Sutton, and Wendy McDonald 164

The effect of induced erythrocythemia upon 5-mile treadmill run time
Melvin H. Williams, Sid Wesseldine, Thomas Somma, and Rudolph Schuster 169

Echocardiographic examination of women collegiate softball champions
Bernard J. Rubal, Joe Rosentswieg, and Bonnie Hamerly 176

Longitudinal study of aerobic power in superior athletes
Yutaka Murase, Kando Kobayshi, Sadatsugu Kamei, and Hideji Matsui 180

Marathon performance in relation to maximal aerobic power and training indices
R.D. Hagan, M.G. Smith, and L.R. Gettman 185

The maximal steady state versus selected running events
Tom P. LaFontaine, Ben R. Londeree, and William K. Spath 190

Strength comparisons in untrained men and trained women athletes
James R. Morrow, Jr. and W.W. Hosler 194

Exercise effects upon reflex time components in weight lifters and distance runners
Gary Kamen, Walter Kroll, and Sheryl T. Zigon 198

Skiing research in Japan
Kazuhiko Watanabe 205

Methodological Investigation

Comparison of hydrostatic weighing at residual volume and total lung capacity
Arthur Weltman and Victor Katch 210

Information for Authors vii

Policy Statement Regarding the Use of Human Subjects and Informed Consent x

Volume 13, No. 4, 1981

Original Investigations

The use of DMSO in tennis elbow and rotator cuff tendonitis: a double-blind study
E.C. Percy and J.D. Carson 215

Exercise after sleep deprivation
Bruce J. Martin and Gary M. Gaddis 220

The heart rate, perceived exertion, and pace of the 1.5 mile run
Allen Jackson, Rod K. Dishman, Scott La Croix, Robert Patton, and Robert Weinberg 224

Changes in renal cortical sialic acids and colloidal iron staining associated with exercise
Edward J. Zambraski, Mitchell C. Bober, Jeffrey E. Goldstein, Constance S. Lakas, and Mark D. Shepard 229

A biomechanical study of the triple jump
Senshi Fukashiro, Yuji Iimoto, Hirokazu Kobayashi, and Mitsumasa Miyashita 233

The effect of a 12-month growth period on the body moments of inertia of children
Robert K. Jensen 238

Case Study

Biomechanical evaluation of bilateral tibial spiral fractures during skiing—a case study
Ronald F. Zernicke 243

Symposium

The effects of drugs on exercise performance
John R. Sutton 246

Drugs—some basic concepts
G.D. Sweeney 247

The effect of drugs on the cardiovascular response to exercise
A.C.P. Powles 252

Drugs affecting the respiratory system with particular reference to asthma
Sandra D. Anderson 259

Drugs used in metabolic disorders
John R. Sutton 266

Effects of exercise performance on drugs used in musculoskeletal disorders
Richard O. Day 272

Information for Authors xi

Policy Statement Regarding the Use of Human Subjects and Informed Consent xiv

Volume 13, No. 5, 1981

Original Investigations

The effects of prolonged exercise on spinally injured subjects
G.C. Gass, E.M. Camp, H.A. Davis, D. Eager, and L. Grout 277

Exercise performance in marathon runners with airway obstruction
Donald A. Mahler, Ernest D. Moritz, and Jacob Loke 284

The effect of an acute bout of exercise on selected pulmonary function measurements
Michael J. Buono, Stefan H. Constable, Alan R. Morton, Thomas C. Rotkis, Philip R. Stanforth, and Jack H. Wilmore 290

Long-term Holter ECG monitoring of athletes
Nora Hanne-Paparo and Jan J. Kellermann 294

Heart rate response to bicycle ergometer exercise in children ages 6-7 years
Albert E. Pels, III, Thomas B. Gilliam, Patty S. Freedson, David L. Geenen, and Susan E. MacConnie 299

Cardiac dimensions and performance after either arm or leg endurance training
Paul D. Thompson, Steven Lewis, Ann Varady, Nils Areskog, Richard Popp, Robert DeBusk, and William Haskell 303

Comparison of nutrient intake in middle-aged men and women runners and controls
Steven N. Blair, Nancy M. Ellsworth, William L. Haskell, Michael P. Stern, John W. Farquhar, and Peter D. Wood 310

Comparison of serum lipids between habitually high and low active pre-adolescent males
William G. Thorland and Thomas B. Gilliam 316

Glucose utilization in human erythrocytes during physical exercise
Giorgio Fornaini, Marina Dacha, Augusto Accorsi, Antonio Fazi, and Elena Piatti 322

A kinetic analysis of sprinting
Ralph V. Mann 325

Metacarpophalangeal flexion forces with respect to age, sex, and exercise habits
Susan J. Hall 329

Body composition and somatotype characteristics of Junior Olympic athletes
William G. Thorland, Glen O. Johnson, Thomas G. Fagot, Gerald D. Tharp, and Richard W. Hammer 332

Effect of fatigue level on rate of force development by the grip flexor muscles
Jay T. Kearney and G. Alan Stull 339

Load-carrying effects on the adult beagle tibia
R.K. Martin, J.P. Albright, W.R. Clarke, and J.A. Niffenegger 343

Book Reviews xiii

Information for Authors ix

Contents of Volume 13 xv

Author Index for Volume 13 xviii

Key Word Index for Volume 13 xix

Guest Reviewers for Volume 13 xxii

Policy Statement Regarding the Use of Human Subjects and Informed Consent xii